

SPECIFICATION AMENDMENTS

On page 1, insert above line 1, insert--Priority Claim

The present application claims priority on European Patent Application 04250471.2 filed 28 January 2004.--

On page 1, above line 1, insert--Field of the Invention--

On page 1, above line 9, insert--Background of the Invention--

On page 5, above line 22, insert--Summary of the Invention--

Amend the paragraphs beginning on page 5, line 22 through page 6, line 2 as follows:

~~--It is one object of the~~ The present invention ~~to provide~~ provides a cooling module for use in an exothermic reaction reactor which is simple and efficient to construct, transport and operate, and which addresses some of the disadvantages described above in relation to cooling systems employed in known reactors.

~~It is another object of the invention to provide~~ The invention also provides a cooling module that simplifies the identification and repair of leaks.

~~It is a further object of~~ In a preferred embodiment, the invention ~~to provide~~ provides a reactor for carrying out an exothermic reaction having a cooling system which ~~addressed~~ addresses the disadvantages described above in relation to known reactors.--

On page 6, above line 26, insert--Brief Description of the Drawings

Without wishing to be restricted to a particular embodiment, the invention will now be described in further detail with reference to the drawings in which:

Figure 1 depicts a vertical cross-section through a cooling module according to the invention;

Figure 2 illustrates a number of cooling modules in a reactor;

Figure 3 is a plan view of a reactor housing a plurality of cooling modules;

Figure 4 is an elevation of the inlet/outlet piping arrangement at the top of a cooling module; and

Figure 5 illustrates the support of a cooling module at the base of a reactor.--

On page 6, above line 26, but after the language above, insert--Detailed Description of the Invention

The present invention provides a removable cooling module having first and second ends for use in a reactor for carrying out an exothermic reaction.--

Paragraph on line 24 of page 8, ending on line 17 of page 9 has been amended as follows:

-- According to another aspect, the invention provides a reactor for carrying out an exothermic reaction, said reactor comprising:

a reactor shell;

means for introducing reactants into the reactor shell;

means for removing products from the reactor shell;

and

cooling means;

wherein said cooling means comprises at least one removable cooling module (1) having first and second ends, for use in a reactor (20) for carrying out an exothermic reaction, the cooling module comprising a coolant feed tube (2); a distribution chamber (4); a plurality of circulation tubes (5); and a collection chamber (6); said coolant feed tube (2) having at its first end an inlet (3), for charging the coolant module (1) with coolant, and communicating with said distribution chamber (4) at its second end; each of said circulation tubes (5) communicating with the distribution chamber (4) through a first end and communicating with said collection chamber (6) through a second end; the collection chamber (6) having an outlet (7) for discharging coolant; wherein the inlet (3) and the outlet (7) are both located towards the same end of the cooling module (1).--

On page 12, delete lines 15-31.

On page 27, above line 1, insert--We claim:--